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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,210	08/05/2003	Larry Robert Lytle	DN 1527	6811
26483	7590	06/22/2004	EXAMINER	
ANCEL W. LEWIS, JR. 425 WEST MULBERRY SUITE 101 FORT COLLINS, CO 80521			JOHNSON III, HENRY M	
			ART UNIT	PAPER NUMBER
			3739	

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,210

Applicant(s)

LYTLE, LARRY ROBERT

Examiner

Henry M Johnson, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/5/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 080503.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant is advised that should claim 1 be found allowable, claims 2 and 3 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Three devices forming an equilateral triangle would implicitly have 120 degrees between the devices. Likewise, claim 3 cites inherent properties of an equilateral triangle.

Drawings

The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings.

Claim Objections

Claim 15 is objected to because of the following informalities: lines 24-28 are a repeat of lines 19-23. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 15, 16 and 19 are indefinite due to citing four sets of laser diodes arranged in an equilateral triangle. The examiner believes the intent was that the laser diodes within the sets were arranged in equilateral triangles.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,602,275 to Sullivan. Sullivan teaches a handheld device with a planar array of light sources (Fig. 7) recessed in a portion interpreted as its back that may apply phototherapy to a patient (Col. 7, lines 36-41). Sullivan discloses LEDs as the radiation source, however, discloses that the source is not limited to LEDs (Col. 8, line 54). Laser diodes and LEDs are well known in the art for phototherapy as evidenced by several of the patents cited in the applicant's background of the disclosure. Sullivan does not disclose expressly sources arranged in triangles or crosses. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to configure the array based on the specific components used because Applicant has not disclosed that a specific array pattern provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with any laser array pattern that provided the radiation required for treatment because treatment is dependent on the dosage and wavelength. Therefore, it would have been an obvious matter of design choice to modify the array configuration of Sullivan to obtain the invention as specified in claims 1-3 and 6.

Regarding claims 4, 5 and 7, Sullivan teaches using LEDs with different wavelengths. Broadly, Sullivan discloses using red, infrared and blue wavelengths (Col. 6, line 48) and specifically 630, 880 and 470 nanometers. With no criticality disclosed by the Applicant of the specific wavelengths claimed, the wavelengths of Sullivan are interpreted as meeting the

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claims. Although Sullivan has fewer radiation devices, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add devices, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claims 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,602,275 to Sullivan as applied to claim 1 above, and further in view of International Publication Number WO 01/32262 to Passy. Sullivan is discussed above and further teaches the use of a programmable unit for operation of the light sources (Fig. 7, # 29). Sullivan discloses individual control of the sources (Col. 8, lines 58-63). Sullivan does not disclose a rechargeable power source in the unit housing. Passy teaches a portable laser therapy device using diode lasers in a cluster (array) with a microprocessor for control and self contained battery (Page 6, line 33). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery power as taught by Passy in the invention of Sullivan to provide true portable operation of the device.

Regarding claim 9, both Passy and Sullivan provide for setting of multiple parameters thus yielding modes of operation. Sullivan discloses time, frequency (col. 8, line 6), pulse duration and pulse repetition (Col. 8, lines 21-30) and Passy teaches setting time and power (Page 3, line 28).

Regarding claims 10 and 12, Sullivan teaches the devices described do not preclude the use of keyboards for operator input, alternate displays for status information or the use of an external computer for control (direct or downloading) of the operation of the devices (Col.8, lines 46-50), thus implying a connection means such as a jack.

Regarding claim 11, Passy teaches a start and a stop button to control the radiation, but does not disclose a single on/off button. At the time the invention was made, it would have

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been an obvious matter of design choice to a person of ordinary skill in the art to use either a single button or separate on and off buttons because Applicant has not disclosed that a button configuration provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either button configuration that provided the starting or stopping of the radiation. Therefore, it would have been an obvious matter of design choice to use the separate buttons of Passy to obtain the invention as specified in claim 11.

Regarding claims 13 and 14, Passy teaches displays on the housing for laser output and time. With the pervasive use of sophisticated electronics in the art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose any number of displays and/or status indicators to provide data and feedback to the operator.

Regarding claims 16 and 17, the setting of the parameters is interpreted as setting the pulse parameters of the sources (Sullivan, Fig. 7) and starting the unit while in position (Passy, Fig. 4) is radiating the tissue. The method of operation is implicit in the apparatus and control features. It is obvious the radiation would be directed at the target tissue and likewise obvious to have the proper parameters set for the desired treatment.

Allowable Subject Matter

Claim 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

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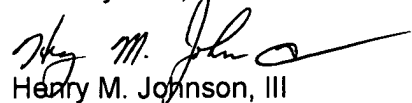
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,702,837 to Gutwein teaches a portable device for treating bodies with infrared radiation using LEDs. U.S. Patent 6,187,029 to Shapiro et al. disclose a handheld unit with a plurality of infrared diodes for providing radiation to a body.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M Johnson, III whose telephone number is (703) 305-0910. The examiner can normally be reached on Monday through Friday from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Henry M. Johnson, III
Patent Examiner
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